

WHAT IS CLAIMED IS:

1 1. A method for loading data from a remote data source record by record, in a computer  
2 system network connecting a source site and a target site via a database connection  
3 communication line, the method comprising the following steps:

4 (a) coupling the source site to at least one data source and to a software server having  
5 multi-database access to DBMSs;

6 (b) at the target site requesting data loading from the source site via a block of Structured  
7 Query Language (SQL) statements or their equivalent; and

8 (c) transporting data record by record via the database connection communication line  
9 according to a multi-database access communication protocol, wherein the target site loading  
10 records concurrently with the unloading of records in the source site.

1 2. The method according to claim 1, wherein a data record being transported across the  
2 database connection communication line as soon as one or more data records are unloaded from  
3 the source site, and data loading at the target site beginning as soon as a record was transported  
4 to the target site.

1 3. The method according to claim 1, wherein the data loading being performed in a pipeline  
2 manner, loading data records in multiple partitions with a plurality of parallel streams, pointed to  
3 by a plurality of data source partition cursors.

1 4. The method according to claim 1, wherein the block of SQL statements comprises  
2 dynamic executable SQL statements performing in the EXECUTE IMMEDIATE mode.

1 5. The method according to claim 1, wherein the block of SQL statements comprises:  
2 a SQL DECLARE CURSOR FOR SELECT statement, for defining a cursor referencing  
3 separately each SELECT statement result record unloading from the server site, and  
4 a LOAD command and an operator INCURSOR with the same cursor name for pointing  
5 to the receiving record at the target site.

1 6. The method according to claim 1, wherein the server site having access to multiple data  
2 sources, physically distributed and disparate DBMSs, residing on different hardware systems and  
3 possibly storing data in a different format.

1 7. The method according to claim 6, wherein the server site loading data from multiple data  
2 sources, further comprising a step for using a means for consolidating data from multiple data  
3 sources.

1 8. The method according to claim 1, wherein the database connection communication line  
2 utilizing the TCP/IP protocol, and the software server having multi-database access to DBMSs  
3 including a Distributed Relational Database Architecture (DRDA).

9. A system for loading data from a remote data source record by record, comprising:  
a source site coupled to at least one data source and having a software server with multi-  
database access to DBMSs;  
a target site requesting data loading from the source site via a block of Structured Query  
Language (SQL) statements or their equivalent; and  
a database connection communication line for transporting data record by record and  
according to a multi-database access communication protocol, wherein the target site loading  
records concurrently with the unloading of records in the source site.

10. The system according to claim 9, wherein a data record being transported across the  
database connection communication line as soon as one or more data records are unloaded from  
the source site, and data loading at the target site beginning as soon as a record was transported  
to the target site.

11. The system according to claim 9, wherein the data loading being performed in a pipeline  
manner, loading data records in multiple partitions with a plurality of parallel streams, pointed to  
by a plurality of data source partition cursors.

12. The system according to claim 9, wherein the block of SQL statements comprises  
dynamic executable SQL statements performing in the EXECUTE IMMEDIATE mode.

1 13. The system according to claim 9, wherein the block of SQL statements comprises:

2 a SQL DECLARE CURSOR FOR SELECT statement, for defining a cursor referencing  
3 separately each SELECT statement result record unloading from the server site, and

4 a LOAD command and an operator INCURSOR with the same cursor name for pointing  
5 to the receiving record at the target site.

1 14. The system according to claim 9, wherein the server site having access to multiple data  
2 sources, physically distributed and disparate DBMSs, residing on different hardware systems and  
3 possibly storing data in a different format.

1 15. The system according to claim 14, wherein the server site loading data from multiple data  
2 sources, further comprising a means for consolidating data from multiple data sources.

1 16. The system according to claim 9, wherein the database connection communication line  
2 utilizing the TCP/IP protocol, and the software server having multi-database access to DBMSs  
3 including a Distributed Relational Database Architecture (DRDA).

1 17. A program storage device readable by a computer tangibly embodying a program of  
2 instructions executable by the computer to perform method steps for loading data from a remote  
3 data source record by record, in a computer system network connecting a source site and a target  
4 site via a database connection communication line, the method comprising the following steps:

5 (a) coupling the source site to at least one data source and to a software server having  
6 multi-database access to DBMSs;

7 (b) at the target site requesting data loading from the source site via a block of Structured  
8 Query Language (SQL) statements or their equivalent; and

9 (c) transporting data record by record via the database connection communication line  
10 according to a multi-database access communication protocol, wherein the target site loading  
11 records concurrently with the unloading of records in the source site.

1 18. The method according to claim 17, wherein a data record being transported across the  
2 database connection communication line as soon as one or more data records are unloaded from  
3 the source site, and data loading at the target site beginning as soon as a record was transported  
4 to the target site.

1 19. The method according to claim 17, wherein the data loading being performed in a  
2 pipeline manner, loading data records in multiple partitions with a plurality of parallel streams,  
3 pointed to by a plurality of data source partition cursors.

1 20. The method according to claim 17, wherein the block of SQL statements comprises  
2 dynamic executable SQL statements performing in the EXECUTE IMMEDIATE mode.

1 21. The method according to claim 17, wherein the block of SQL statements comprises:

2 a SQL DECLARE CURSOR FOR SELECT statement, for defining a cursor referencing  
3 separately each SELECT statement result record unloading from the server site, and

4 a LOAD command and an operator INCURSOR with the same cursor name for pointing  
5 to the receiving record at the target site.

1 22. The method according to claim 17, wherein the server site having access to multiple data  
2 sources, physically distributed and disparate DBMSs, residing on different hardware systems and  
3 possibly storing data in a different format.

1 23. The method according to claim 22, wherein the server site loading data from multiple  
2 data sources, further comprising a step for using a means for consolidating data from multiple  
3 data sources.

1 24. The method according to claim 17, wherein the database connection communication line  
2 utilizing the TCP/IP protocol, and the software server having multi-database access to DBMSs  
3 including a Distributed Relational Database Architecture (DRDA).